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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,518	01/26/2001	Pierre Messier	CLW 2 0142	5871
24964 7590 01/10/2008 GOODWIN PROCTER L.L.P 599 LEXINGTON AVE. NEW YORK, NY 10022			EXAMINER CHORBAJI, MONZER R	
			ART UNIT '1797	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/770,518	<b>Applicant(s)</b> MESSIER ET AL.	
	<b>Examiner</b> MONZER R. CHORBAJI	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 52,55,56,62,64-66,69,70,76,78-80,83,84,90 and 92-95 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 52,55,56,62,64-66,69,70,76,78-80,83,84,90 and 92-95 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

**This non-final action is in response to the RCE/Amendment submitted on 09/24/07**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 52, 55-56, 62, 64-66, 69-70, 76, 78-80, 83-84, 90, and 92-95 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The disclosure as whole does not reasonably convey to one skilled in the art that the inventors had possession of the particularly claimed ranges in claims 52, 80 and 94-95 that the disinfectant composition flash vaporized so as to leave an essentially dry surface having the anti-microbial agent deposited thereon "within 10 minutes" or "within 5 minutes".

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 66, 69-70, 76 and 78-79 are rejected under 35 U.S.C. 102(b) as being anticipated by Boch et al (U.S.P.N. 3,104,061).

Regarding claim 66, Boch discloses a spray apparatus (the unlabeled container in communication with the spray nozzle as shown in figure 1 and as described in col.1, lines 61-63 and col.2, lines 1-5). The spray dispenser has a nozzle (figure 1:11 and col.2, lines 2-5) that is coupled to the composition container (the unlabeled container shown in figure 1 and col.1, lines 61-63 and col.2, line 1). As to the recitation of the make-up of the anti-microbial composition, claim 66 is an apparatus claim. The composition in apparatus claim 66 does not further limit the claim and is not considered a structural part of its subject matter (MPEP 2114 and 2115).

The subject matter of dependent apparatus claims 69-70, 76 and 78-79 are not considered structural limitations to further limit their scopes where Boch's dispenser is capable of holding various types of disinfecting solutions including the claimed composition.

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 52, 55-56, 62, 64-65 and 94-95 rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al (U.S.P.N. 5,869,440).

Regarding claim 52, Kobayashi discloses an aqueous liquid flash-dry disinfectant composition (col.1, lines 6-11 and col.2, lines 25-28) for disinfecting an inanimate surface (col.4, lines 50-51 or col.4, lines 66-67 where the surface of a glass tube is treated with the bleach-sterilizing composition). The reference further describes that the composition includes the following required components: a bleaching aqueous solution with hydrogen peroxide base (solution A) and an aqueous solution mainly containing a suitable amount of dicyandiamide for hydrogen peroxide activation and an organic and/or inorganic builder (solution B) that are mixed and kept alkaline (col.2, lines 11-15). Kobayashi goes on to describe that additional components can be added, but are not required components of the basic composition. For example, a hydrogen peroxide stabilizer can be added (col.2, lines 40-41), or an alkali agent can be added (col.3, lines 8-10 and lines 55-56), or surfactants, hydrotropic agent, or solvent or thickener, (col.3, lines 56-58), viscosity improver agents can be added as well (col.4, lines 48-51). The viscosity improver agents are added only when the composition is to be applied to a ceiling surface, a vertical surface or an inclined surface). Furthermore, Kobayashi teaches that ratio of mixing solutions A and B is arbitrary, but the concentration of solution A (hydrogen peroxide) after mixing is between 0.3 to 30 wt%, preferably 0.5 to 6.0 wt%, and the concentration of dicyandiamide (one component of solution B) is between 2 to 20 wt% and the concentration of the builder in the mixture is in the range of 0.05 to 10.0 wt% (the other component of solution B). For example, one embodiment

composition of Kobayashi is as follows: in a 100 gram sample there is 6 grams of hydrogen peroxide, 10 grams of dicyandiamide, 10 grams of inorganic builder, sodium silicate (col.3, line 3 and lines 40-41), 50 grams of ethanol (col.4, line 36 and lines 45-47) and 24 grams water (col.2, lines 25-27, examples 1-10), adding up to total mass of 100 grams. Using the density values of the respective components at 20 °C, the following calculations are: hydrogen peroxide (6 wt% is equal to 4.2 v% that is calculated using the density of hydrogen peroxide at 20°C to be 1.4 g/cm<sup>3</sup>); dicyandiamide (10 wt% is equal 7 v% that is calculated using the density of dicyandiamide at 20°C to be 1.400 g/cm<sup>3</sup>); inorganic builder sodium silicate (10 wt% is equal 4 v% that is calculated using the density of sodium silicate at 20°C to be 2.4 g/cm<sup>3</sup>); ethanol ( 50 wt% is equal to 62 v% that is calculated using the density of ethanol at 20°C to be 0.79 g/cm<sup>3</sup>); and water (24 wt% of water is equal to 23 v% that is calculated using the density of water at 20°C to be 1.0 g/cm<sup>3</sup>). As to the limitation that the flash-dry disinfectant composition is able, once applied onto an inanimate surface to be disinfected, to flash vaporize so as to leave an essentially dry surface having the anti-microbial agent deposited thereon within 10 minutes, since compositions of the scope claim 52 and the disclosure of Kobayashi are physically the same, then both compositions have the same properties. That is depending upon the applied amount of Kobayashi's composition to inanimate surfaces, it is capable of drying within 10 minutes leaving an essentially dry surface having the anti-microbial agent deposited thereon. (see MPEP 2112.01, II). In addition, Kobayashi's composition is capable of being sprayed in an aerosol form.

Regarding claims 55-56 and 64-65, Kobayashi composition includes an alkanol of formula ROH wherein R is a group containing 1 to 6 carbon atoms such as the compound ethanol (col.4, line 36).

Regarding claim 62, a one embodiment composition of Kobayashi is as follows: in a 100 gram sample there is 20 grams of hydrogen peroxide, 10 grams of dicyandiamide, 10 grams of inorganic builder, sodium silicate (col.3, line 3 and lines 40-41), 40 grams of ethanol (col.4, line 36 and lines 45-47) and 20 grams water (col.2, lines 25-27, examples 1-10), adding up to total mass of 100 grams. Using the density values of the respective components at 20 °C, the following calculations are: hydrogen peroxide (20 wt% is equal to 15 v% that is calculated using the density of hydrogen peroxide at 20°C to be 1.4 g/cm<sup>3</sup>); dicyandiamide (10 wt% is equal 7.4 v% that is calculated using the density of dicyandiamide at 20°C to be 1.400 g/cm<sup>3</sup>); inorganic builder sodium silicate (10 wt% is equal 4.3 v% that is calculated using the density of sodium silicate at 20°C to be 2.4 g/cm<sup>3</sup>); ethanol ( 40 wt% is equal to 53 v% that is calculated using the density of ethanol at 20°C to be 0.79 g/cm<sup>3</sup>); and water (20 wt% of water is equal to 21 v% that is calculated using the density of water at 20°C to be 1.0 g/cm<sup>3</sup>).

Regarding claims 94-95, Kobayashi discloses an aqueous liquid flash-dry disinfectant composition (col.1, lines 6-11 and col.2, lines 25-28) for disinfecting an inanimate surface (col.4, lines 50-51 or col.4, lines 66-67 where the surface of a glass tube is treated with the bleach-sterilizing composition). As to the limitations that the flash-dry disinfectant composition is able, once applied onto an inanimate surface to be

disinfected, to flash vaporize so as to leave an essentially dry surface having the anti-microbial agent deposited thereon within 10 minutes or within 5 minutes, since compositions of the scope independent claim 52 and the disclosure of Kobayashi are physically the same, then both compositions have the same properties. That is depending upon the applied amount of Kobayashi's composition to inanimate surfaces, it is capable of drying within 10 minutes or within 5 minutes leaving an essentially dry surface having the anti-microbial agent deposited thereon (see MPEP 2112.01, II). In addition, Kobayashi's composition is capable of being sprayed in an aerosol form.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions



covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**10.** Claims 80, 83-84, 90 and 92-93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al (U.S.P.N. 5,869,440) in view of Petri (EP 0 842 605 A1).

Regarding claim 80, Kobayashi discloses a method for disinfecting (col.1, lines 6-11 and col.2, lines 25-28) an inanimate surface (col.4, lines 50-51 or col.4, lines 66-67 where the surface of a glass tube is treated with the bleach-sterilizing composition), including applying an aqueous flash-dry disinfectant composition in liquid form (col.3, lines 13-18) onto the inanimate surface (for example, col.4, lines 66-67 where the surface of a glass tube is treated with the bleach-sterilizing composition). The reference further describes that the composition includes the following required components: a bleaching aqueous solution with hydrogen peroxide base (solution A) and an aqueous solution mainly containing a suitable amount of dicyandiamide for hydrogen peroxide activation and an organic and/or inorganic builder (solution B) that are mixed and kept alkaline (col.2, lines 11-15). Kobayashi goes on to describe that additional components can be added, but are not required components of the basic composition. For example, a hydrogen peroxide stabilizer can be added (col.2, lines 40-41), or an alkali agent can be added (col.3, lines 8-10 and lines 55-56), or surfactants, hydrotropic agent, or

solvent or thickener, (col.3, lines 56-58), viscosity improver agents can be added as well (col.4, lines 48-51. The viscosity improver agents are added only when the composition is to be applied to a ceiling surface, a vertical surface or an inclined surface).

Furthermore, Kobayashi teaches that ratio of mixing solutions A and B is arbitrary, but the concentration of solution A (hydrogen peroxide) after mixing is between 0.3 to 30 wt%, preferably 0.5 to 6.0 wt%, and the concentration of dicyandiamide (one component of solution B) is between 2 to 20 wt% and the concentration of the builder in the mixture is in the range of 0.05 to 10.0 wt% (the other component of solution B). For example, one embodiment composition of Kobayashi is as follows: in a 100 gram sample there is 6 grams of hydrogen peroxide, 10 grams of dicyandiamide, 10 grams of inorganic builder, sodium silicate (col.3, line 3 and lines 40-41), 50 grams of ethanol (col.4, line 36 and lines 45-47) and 24 grams water (col.2, lines 25-27, examples 1-10), adding up to total mass of 100 grams. Using the density values of the respective components at 20 °C, the following calculations are: hydrogen peroxide (6 wt% is equal to 4.2 v% that is calculated using the density of hydrogen peroxide at 20°C to be 1.4 g/cm<sup>3</sup>); dicyandiamide (10 wt% is equal 7 v% that is calculated using the density of dicyandiamide at 20°C to be 1.400 g/cm<sup>3</sup>); inorganic builder sodium silicate (10 wt% is equal 4 v% that is calculated using the density of sodium silicate at 20°C to be 2.4 g/cm<sup>3</sup>); ethanol ( 50 wt% is equal to 62 v% that is calculated using the density of ethanol at 20°C to be 0.79 g/cm<sup>3</sup>); and water (24 wt% of water is equal to 23 v% that is calculated using the density of water at 20°C to be 1.0 g/cm<sup>3</sup>). As to the limitation that the flash-dry disinfectant composition is able, once applied onto an inanimate surface to

be disinfected, to flash vaporize so as to leave an essentially dry surface having the anti-microbial agent deposited thereon within 10 minutes, since compositions of the scope claim 52 and the disclosure of Kobayashi are physically the same, then both compositions have the same properties. That is depending upon the applied amount of Kobayashi's composition to inanimate surfaces, it is capable of drying within 10 minutes leaving an essentially dry surface having the anti-microbial agent deposited thereon (see MPEP 2112.01, II). Kobayashi does not specifically teach spraying his composition in an aerosol form and is silent with regard that his flash-dry disinfectant composition is able, once sprayed in aerosol form onto an inanimate surface to be disinfected, to flash vaporize to leave an essentially dry surface having the anti-microbial agent deposited thereon within 10 minutes. Petri discloses a disinfecting composition that includes hydrogen peroxide (page 3, numbered lines 44-45), ethanol (page 9, numbered line 23) and water (page 5, numbered lines 45-46) where no visible residues are left onto the treated surface (page 10, numbered lines 12-13) such that one of ordinary skill in the art would recognize that the surfaces treated with Petri's composition are essentially dry after a certain amount of time. Petri dispenses his composition in fine liquid droplets (considered as aerosol) using spray dispensers (page 9; see the section for packaging form of the compositions), since using such dispensers result in applying the composition uniformly to a relatively large area of a surface to be disinfected (page 2, numbered line 58 and page 3, numbered lines 1-2). One of ordinary skill in the art would recognize that placing Kobayashi's composition into Petri's dispenser would result upon spraying the composition onto an inanimate surface in having the composition

completely dries within 10 minutes or less, while leaving the anti-microbial agent deposited thereon, because compositions of the scope claim 80 and the disclosure of Kobayashi are physically the same, then both compositions have the same properties (see MPEP 2112.01, II). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the composition in Kobayashi with the spray dispenser since using such dispensers result in applying the composition uniformly to a relatively large area of a surface to be disinfected as explained by Petri (page 2, numbered line 58 and page 3, numbered lines 1-2).

Regarding claims 83-84 and 92-93, Kobayashi method provides a bleach-sterilizing composition (col.1, lines 6-11) that includes an alkanol of formula ROH wherein R is a group containing 1 to 6 carbon atoms such as the compound ethanol (col.4, line 36) and wherein hydrogen peroxide is present at a value of 15 v% (col.2, lines 25-27, for example, 20 wt% of hydrogen peroxide is equal to 15 v% that is calculated using the density of hydrogen peroxide at 20°C to be 1.4 g/cm<sup>3</sup>).

Regarding claim 90, a one embodiment composition of Kobayashi is as follows: in a 100 gram sample there is 20 grams of hydrogen peroxide, 10 grams of dicyandiamide, 10 grams of inorganic builder, sodium silicate (col.3, line 3 and lines 40-41), 40 grams of ethanol (col.4, line 36 and lines 45-47) and 20 grams water (col.2, lines 25-27, examples 1-10), adding up to total mass of 100 grams. Using the density values of the respective components at 20 °C, the following calculations are: hydrogen peroxide (20 wt% is equal to 15 v% that is calculated using the density of hydrogen peroxide at 20°C to be 1.4 g/cm<sup>3</sup>); dicyandiamide (10 wt% is equal 7.4 v% that is

calculated using the density of dicyandiamide at 20°C to be 1.400 g/cm<sup>3</sup>); inorganic builder sodium silicate (10 wt% is equal 4.3 v% that is calculated using the density of sodium silicate at 20°C to be 2.4 g/cm<sup>3</sup>); ethanol ( 40 wt% is equal to 53 v% that is calculated using the density of ethanol at 20°C to be 0.79 g/cm<sup>3</sup>); and water (20 wt% of water is equal to 21 v% that is calculated using the density of water at 20°C to be 1.0 g/cm<sup>3</sup>).

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 52, 55-56, 62, 64-66, 69-70, 76, 78-80, 83-84, 90 and 92-95 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R. CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 9:00-5:30.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, GLADYS J. CORCORAN can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRC



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